

## **WHAT IS CLAIMED IS:**

1. A method for protecting traffic in a fiber-optic telecommunications network, said method comprising the steps of:

- providing at least two nodes or network elements;
- providing at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration, said at least one fiber optic span comprising working fiber and protection fiber, wherein it further includes the step of
- providing the network with an MS-SPRING shared protection mechanism for closed ring networks.

2. A method according to claim 1, wherein it comprises the further step of instructing said at least two nodes of the network so that they disregard any ring command or failure coming from any node of the same network or issued by a management system.

3. A method according to claim 2, wherein the step of instructing said at least two nodes of the network so that they disregard any ring command or failure comprises the step of imparting a Lockout of Working Channels-Ring command to said at least two nodes of the network.

4. A method according to claim 2, wherein the nodes of said network having a linear configuration comprise a first and a second end nodes, wherein the method comprises the further steps of:

- connecting said end nodes by means of one or more fiber optic spans so as to obtain a closed-ring network; and
- removing the instruction to disregard any ring command or failure from all the nodes of the former open-ring network.

5. A method according to claim 3, wherein the nodes of said network having a linear configuration comprise a first and a second end nodes, wherein the method comprises the further steps of:

- connecting said end nodes by means of one or more fiber optic spans so as to obtain a closed-ring network; and
- removing the instruction to disregard any ring command or failure from all the nodes of the former open-ring network.

6. A network element for a fiber-optic telecommunications network, said network comprising:

- at least two nodes or network elements;
- at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration, said at least one fiber optic span comprising working fiber and protection

fiber, wherein the network element is managed by an MS-SPRING shared protection mechanism for closed ring networks.

7. A network element according to claim 6, wherein it is instructed to disregard any ring command or failure coming from other network elements of the same network.

8. A network element according to claim 7, wherein the instruction to disregard any ring command or failure is removed should said linear network be closed with one or more spans to close it in a ring configuration.

9. A fiber-optic telecommunications network, said network comprising:

- at least two nodes or network elements;
- at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration, said at least one fiber optic span comprising working fiber and protection fiber, wherein it further comprises
- an MS-SPRING shared protection mechanism for closed ring networks.

10. A network according to claim 9, wherein the network elements thereof comprise instructions so that they disregard any ring command or failure coming from other network elements of the same network..

11. The use of an MS-SPRING protocol for a fiber-optic closed ring network, wherein it is used for a network comprising:

- at least two nodes or network elements; and
- at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration.

12. A computer program comprising computer program code means adapted to perform all the steps of claims 1 to 4 when said program is run on a computer.

13. A computer-readable medium having a program recorded thereon, said computer-readable medium comprising computer program code means adapted to perform all the steps of claims 1 to 4 when said program is run on a computer.